

Iowa Department of Agriculture Asks Producers and Veterinarians for Help with New BSE Surveillance Program

Bovine Spongiform Encephalopathy (BSE), commonly known as ‘mad cow’ disease was first diagnosed in Great Britain in 1986. To date, BSE has been confirmed in Great Britain, Belgium, France, Germany, Spain, Switzerland, Japan, Canada, and the United States. The United States has had an active surveillance program for many years.

The Animal and Plant Health Inspection Service (APHIS), in cooperation with the Food Safety and Inspection Service (FSIS), and the Food and Drug Administration (FDA), implemented an Enhanced BSE Surveillance Program that tested over 600,000 samples (June 2004 through March 2006) and found only two positive domestic cows, one each in Texas and Alabama. Both of these cattle were born before the 1997 implementation of the FDA feed ban prohibiting the feeding of feedstuff derived from ruminants to other ruminants. The results of enhanced surveillance indicate that while BSE is present, it is at an extremely low level in U.S. cattle. This warrants movement to a BSE Ongoing Surveillance Plan designed to detect disease should the prevalence rise above 1 case per 1,000,000 adult cattle.

We need your help. USDA APHIS VS will pay accredited veterinarians under a fee basis agreement for collection and submission of samples from cattle meeting the case definition described below exhibiting central nervous system clinical signs and/or non-ambulatory cattle. In addition, we are also providing assistance to the producer for the proper disposal of tested animals.

The case definition for participation in this program:

Cattle of any age:

- Cattle that are affected by illnesses that are refractory to treatment (including, but not limited to, anorexia, loss of condition in spite of good appetite, pneumonia, decreased milk yield) **and** that are displaying progressive behavioral changes that are not of an acute nature (including, but not limited to, apprehension, nervousness, excitability, aggression, head shyness, hypermetria (high stepping), persistent kicking when milked, changes in herd hierarchical status, excessive nose scratching, hesitation at gates/barriers, reluctance to cross concrete or other “slippery” surfaces), or
- Cattle with CNS signs.

Cattle 30 months of age or older:

- Cattle that cannot rise from a recumbent position (downer) or that cannot walk, including, those with broken appendages, severed tendons or ligaments, nerve paralysis, fractured vertebral columns, or metabolic conditions, as well

as cattle that are severely weakened though they may be able to stand and walk for brief periods of time

- Cattle that are euthanized or that died as a result of a moribund condition, tetanus, emaciation, injuries, or nonambulatory conditions. For those cattle that are dead prior to arrival of sampling personnel on-farm, additional clinical history must be collected.

Accredited veterinarian participation and remuneration:

- Phone USDA APHIS VS Office to obtain pre-approval (515-284-4140)
- Completely and thoroughly fill out submission form and supplemental form
- Collect, prepare and submit the fresh sample (obex portion of the brain stem) to Colorado State University. Do not submit samples that are affected with postmortem or post-collection decomposition such that they cannot be recognized as brainstem, unless the animal meets the criteria for “highly suspicious for BSE”, or exhibits CNS signs. Place sample tube on cold packs as soon as possible. DO NOT ship sample in formalin.
- Fax copy of submission form (with a thorough history documenting clinical signs) and supplemental form to USDA APHIS VS office (515-284-4156)
- Complete payment paperwork and fee basis agreement
- Collect **\$100.00**

Producer disposal assistance:

- Producer documents proper burial of the animal carcass (producer disposal certification form)
- Collect up to **\$100.00**

Producers are encouraged to contact their herd veterinarians or the USDA APHIS VS Office if that think that they have an animal that meets the case definition for testing.

Your state or federal district veterinarian can provide you with additional information on sample collection and submission, as well as provide copies of the submission form, and sample collection kits. It is important that the sample be collected and prepared correctly so that meaningful results are obtained.

Rabies is obviously an important rule-out for CNS cases. Submission of brain specimens for rabies testing will be left to the professional judgment of the accredited veterinarian. The practitioner will be responsible for submitting appropriate samples for rabies diagnosis to the appropriate diagnostic laboratory (not NVSL). Also, any additional differential diagnoses for which testing is desired must be submitted to the appropriate diagnostic laboratory by the practitioner.

If you have additional questions, please contact your state/federal district veterinarian or USDA APHIS VS at 515-284-4140.